

**SINGLE WIRE RETURN DEVICE IN A  
FIBER TO THE HOME SYSTEM**

**ABSTRACT OF THE DISCLOSURE**

5           Systems and methods are disclosed for providing reverse signals from a plurality  
of DHCTs to a downstream modulator that is located in the headend facility. The present  
invention includes a single wire return device (SWRD) that receives RF modulated  
signals, dynamically determines the address of the associated modulator, and converts the  
signals into Ethernet signals. The Ethernet signals are subsequently provided to the  
10       headend facility via fiber cable.